conductor path and of the electrically insulating surface span at least one recess of the substrate in a bridge manner and the conductor path is arranged in a plane, the process comprising:

providing a metal etching stop layer between the metal substrate and the electrically insulating surface of the metal substrate, wherein the metal etching stop layer comprises a material selected from the group consisting of Ti, Pt, Ni, and combinations thereof;

providing the metal substrate on its reverse side with a photo-lithographic enamel structuring; and

conducting a wet chemical etching from the reverse side of the substrate up to the previously applied metal etching stop layer.

30. The process according to claim 29, wherein the wet chemical etching from the reverse side of the metal substrate up to the metal etching stop layer imparts a low thermal mass to the resistor.

31. The process according to claim 30, wherein the wet chemical etching comprises spray etching with an $FeCl_3$ solution.

32. The process according to claim 29, wherein the metal etching stop layer is applied to the metal substrate in a thickness of about 0.1 to 0.6 μm.

33. The process according to claim 29, wherein the metal etching stop layer is applied to the metal substrate by PVD or CVD processes.

34. The process according to claim 29, wherein the electrically insulating surface comprises a material selected from the group consisting of SiO, MgO, ZrO, Si_3N_4, TiO, Al_2O_3, and combinations thereof.

35. The process according to claim 29, wherein the electrically insulating surface is applied to the metal etching stop layer in a thickness about 0.5 to 10 μm.